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EXAMINER

SOHN, SEUNG C

ART UNIT PAPER NUMBER

2878

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,094

Applicant(s)

LAUTENSCHLAGER ET AL.

Examiner

Seung C. Sohn

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.                      6) ☐ Other:

## DETAILED ACTION

### *Claim Objections*

1. **Claim 26** is objected to because of the following informalities:

On claim 26, line 2, "comprises" after "the engagement device" should be changed to -- comprise --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. ***Claims 21-23 and 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Lederer (Patent No. US 4,173,717).***

Referring to claim 21, Lederer shows in Fig. 1 a housing (10), wherein an optics module (30) and an electronics module (34) are located in the housing (Col. 2, lines 48-64); wherein the housing contains a receiving means (48, i.e., small apertures) and the optics module has an engagement device (40, i.e. flexible support) by which the optics module is attached in the housing by engagement of the engagement device in the receiving means and wherein the housing has two side walls (17) at an angle to one another and a light passage

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opening (18) in one of the side walls (Col. 3, lines 4-35); wherein the engagement device of the optics module is adapted to enable the optics module to be installed in the housing in at least two different orientations which correspond to an alignment of the optics module relative to the light passage opening (Col. 3, lines 36-41). If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation"). See MPEP 2111.01.

**Referring to claim 22**, Lederer shows in Fig. 1 a transmitter (34, i.e., light-emitting diode), wherein the transmitter is located in a receptacle device (31, i.e., shell) which is provided in the optics module (30) (Col. 2, lines 48-64).

**Referring to claim 23**, Lederer shows in Fig. 1 a receiver (34, i.e. photodiode), wherein the receiver is a component of the electronics module (Col. 2, line 53).

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**Referring to claim 26**, Lederer shows in Fig. 1 that the receiving means (48, i.e., small apertures) and the engagement device (42) comprises holes and pins (46, i.e., small tabs) (Col. 3, lines 11-14).

**Referring to claim 27**, Lederer shows in Fig. 1 that the engagement (42) device is engaged in the receiving means (48) (col. 3, lines 11-14).

**Referring to claim 28**, Lederer discloses that the transmitter (34) is a laser diode (Col. 2, line 53).

**Referring to claim 29**, Lederer discloses that the receiver (34) is a largearea photodiode (Col. 2, line 53).

**Referring to claim 30**, Lederer shows in Fig. 1 a housing (10, i.e., frame), wherein an optics module (30) and an electronics module (34, i.e., transducer) are located in the housing (Col. 2, lines 52-64); wherein the optics module is pivotally mounted in the housing for rotation around a longitudinal axis thereof (Col. 3, lines 33-35).

**Referring to claim 31**, Lederer shows in Fig. 1 that the housing has two side walls (17, i.e., U-shaped cover plate) which are at an angle to one another; wherein a light passage opening (18, i.e., optical window or filter) is provided in each of the side walls and the optics module (30) is pivotally mounted in the housing (10) enabling the optics module to be selectively aligned with either one of the two light passage openings (Col. 2, lines 36-41).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. ***Claims 24-25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lederer (Patent No. US 4,173,717).***

Referring to claim 24, Lederer discloses that the optical assembly is for the use of "electric eye" systems (Col. 1, lines 5-25), but is silent that the electronics module has all electronic components necessary for operation of the optical proximity switch. It would have been obvious to one of ordinary skill in the art to provide an electronics module with all electronic components necessary for operation of the optical proximity switch in the device of Lederer since "electric eye" systems also can be used as an optical proximity switch.

Referring to claim 25, Lederer discloses as above, but does not disclose that the electronics module comprises a flexible, foldable conductor film. It would have been obvious to one of ordinary skill in the art to provide a flexible, foldable conductor film in the device of Lederer for the purpose of decreasing the size of the device.

Referring to claim 32, Lederer shows as above, but is silent that two sidewalls are connected to one another by a cylindrical sector-shaped wall section having a continuous light passage opening. It would have been obvious

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to one of ordinary skill in the art to provide cylindrical sector-shaped wall section in the device of Lederer instead of right-angle shaped wall for the purpose of maximizing the sensitivity of photoelectric emitter/detector.

### ***Conclusion***

6. Claims 21-32 are rejected.
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Kahl, Jr. et al. (Patent No. US 3,752,978)** discloses a pivotally mounted reflective element incorporated in each optical system to facilitate optical alignment.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung C. Sohn whose telephone number is (703) 308-4093. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

*SCS*

SCS  
March 14, 2003



KEVIN PYO  
PRIMARY EXAMINER